## **EAST Search History**

## EAST Search History (Prior Art)

| Ref<br>#   | Hits  | Search Query                                     | DBs   | Default<br>Operator | Plurals | Time Stamp          |
|------------|-------|--|---|---------------------|---------|---------------------|
| S1         | 29385 | (cohesive adj energy adj density or CED) and oil | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR                  | ON      | 2008/09/11<br>13:43 |
| \$2        | 42    | S1 and norbornane                                | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR                  | ON      | 2008/09/11<br>13:44 |
| S3         | 4     | S2 and @ad<"20040329"                            | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR                  | ON      | 2008/09/11<br>13:45 |
| <b>S</b> 4 | 0     | S3 and (lubricant or lubricat\$4)                | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR                  | ON      | 2008/09/11<br>13:45 |

| S5  | 23 | JP-2003514100-\$.DID. OR EP-1246896-\$.DID. OR US-6372696-\$.DID. OR WO-0134738-\$.DID. OR JP-1025489-\$.DID. OR JP-11349969-\$.DID. OR JP-11293265-\$.DID. OR JP-11349971-\$.DID. OR JP-11349972-\$.DID. OR JP-11349971-\$.DID. OR JP-2001354988-\$.DID. OR JP-2002194371-\$.DID. OR JP-6253399-\$.DID. OR US-1267133-\$.DID. OR DE-3687214-\$.DID. OR US-9000917-\$.DID. OR US-4704216-\$.DID. OR JP-2003277785-\$.DID. OR US-2422143-\$.DID. OR LS-2423143-\$.DID. OR LS-2423143-\$.DID. OR LS-2423143-\$.DID. OR LS-2423143-\$.DID. OR LS-2423143-\$.DID. OR LS-2423143-\$.DID. OR LS-2434814-\$.DID. OR US-20030181339-\$.DID. | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR |    | 2008/09/11<br>13:49 |
|-----|----|---|---|----|----|---------------------|
| S6  | 1  | (cohesive adj energy adj density or CED) and S5   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>13:50 |
| S7  | 1  | S5 and norbornane   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>13:50 |
| S8  | 1  | EP-1246896-\$.DID.  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>14:02 |
| S9  | 1  | S7 and base   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>14:40 |
| S10 | 0  | S7 and sulfonate near base  | US PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>14:40 |

| S11 | 1  | S7 and sulfonate and base                               | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>14:41 |
|-----|----|---|---|----|----|---------------------|
| S12 | 1  | S11 and KOH   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>14:43 |
| S13 | 45 | (cohesive adj energy adj density or CED) and norbornane | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>15:08 |
| S14 | 59 | (cohesive adj energy adj density or CED) near oil       | US PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>15:24 |
| S15 | 11 | S14 and (lubricant or lubricat\$4)                      | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>15:24 |
| S16 | 65 | (energy adj density or CED) near oil                    | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>15:31 |
| S17 | 6  | (energy adj density) near oil                           | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>15:32 |

| S18  | 12    | US-6372696-\$.DID. OR US-1221199-\$.DID. OR US-6242393-\$.DID. OR US-6253399-\$.DID. OR US-4704216-<br>\$.DID. OR US-20030181339-\$.DID. | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>16:30 |
|------|-------|--|---|----|----|---------------------|
| S19  | 1     | S18 and norbornane   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>16:30 |
| \$20 | 97    | "HATA, HITOSHI".in.  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>16:31 |
| \$21 | 64    | "KOGA, HIDETOSHI".in.  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>16:32 |
| S22  | 21    | "MIYAJI, TOMOMI".in.   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>16:32 |
| \$23 | 154   | "TSUBOUCHI, TOSHIYUKI".in.   | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>16:33 |
| S24  | 15163 | "IDEMITSU KOSAN CO".as.  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>16:33 |

| \$25 | 15249 | S20 or S21 or S22 or S23 or S24                          | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>16:34 |
|------|-------|--|---|----|----|---------------------|
| S26  | 7     | S25 and (cohesive adj energy adj density or CED) and oil | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>16:35 |
| \$27 | 31    | "508".das. and norbornane                                | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>17:01 |
| S28  | 17    | S27 and (phosphoric or phosphate)                        | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>17:03 |
| S29  | 17    | S28 and viscosity  | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>17:04 |
| S30  | 1     | S29 and (ced or cohesive adj density)                    | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>17:04 |
| S31  | 13    | S29 and (phosp\$5 adj ester or calcium adj sulfonate)    | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON | 2008/09/11<br>17:05 |

| S32 | 1805 | (508/388,390,419,420,421,433,591,564).COLS. | US-PGPUB;<br>USPAT; USOCR                             | OR | OFF | 2008/09/11<br>17:09 |
|-----|------|---|---|----|-----|---------------------|
| S33 | 6    | S32 and norbornane                          | US-PGPUB;<br>USPAT; USOCR                             | OR | ON  | 2008/09/11<br>17:09 |
| S34 | 4    | S33 and (phosphoric or phosphate)           | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON  | 2008/09/11<br>17:09 |
| S35 | 0    | S34 and calcium adj sulfonate               | US-PGPUB;<br>USPAT; USOCR                             | OR | ON  | 2008/09/11<br>17:10 |
| S36 | 23   | sulfur adj antiwear                         | US-PGPUB;<br>USPAT; USOCR                             | OR | ON  | 2008/09/12<br>09:04 |
| S37 | 23   | S36 and (lubricant or lubricat\$4)          | US-PGPUB;<br>USPAT; USOCR                             | OR | ON  | 2008/09/12<br>09:05 |
| S38 | 2    | S37 and cvt                                 | US-PGPUB;<br>USPAT; USOCR                             | OR | ON  | 2008/09/12<br>09:06 |
| S39 | 3    | S37 and traction                            | US-PGPUB;<br>USPAT; USOCR                             | OR | ON  | 2008/09/12<br>09:06 |
| S40 | 535  | thioether near (phosphate or phosphite)     | US-PGPUB;<br>USPAT; USOCR                             | OR | ON  | 2009/06/25<br>18:24 |
| S41 | 336  | S40 and @ad< "20040329"                     | US-PGPUB;<br>USPAT; USOCR                             | OR | ON  | 2009/06/25<br>18:24 |
| S42 | 52   | S41 and (transmission or traction)          | US-PGPUB;<br>USPAT; USOCR                             | OR | ON  | 2009/06/25<br>18:24 |
| S43 | 2    | ("6320088".pn.                              | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON  | 2009/11/06<br>08:11 |

| S44 | 0     | \$43 and norbon\$4                     | US PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON  | 2009/11/06<br>08:11 |
|-----|-------|--|---|----|-----|---------------------|
| S45 | 0     | S43 and norbonane                      | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON  | 2009/11/06<br>08:12 |
| S46 | 2     | EP-989177-\$.DID.                      | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON  | 2009/11/06<br>08:23 |
| S47 | 1     | "5126065".pn.                          | USPAT   | OR | OFF | 2010/05/15<br>07:31 |
| S48 | 0     | thio adj hydrogen adj phosphate        | US-PGPUB;<br>USPAT; USOCR                             | OR | OFF | 2010/05/15<br>09:00 |
| S49 | 0     | thio near hydrogen adj phosphate       | US-PGPUB;<br>USPAT; USOCR                             | OR | OFF | 2010/05/15<br>09:00 |
| S50 | 28577 | hydrogen adj phosphate                 | US-PGPUB;<br>USPAT; USOCR                             | OR | OFF | 2010/05/15<br>09:00 |
| S51 | 15    | thio with hydrogen adj phosphate       | US-PGPUB;<br>USPAT; USOCR                             | OR | OFF | 2010/05/15<br>09:00 |
| S52 | 1990  | "508" and hydrogen adj phosphate       | US-PGPUB;<br>USPAT; USOCR                             | OR | OFF | 2010/05/15<br>09:01 |
| S53 | 116   | "508".clas. and hydrogen adj phosphate | US-PGPUB;<br>USPAT; USOCR                             | OR | OFF | 2010/05/15<br>09:01 |
| S54 | 58    | \$53 and @ad<"20040329"                | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON  | 2010/05/15<br>09:01 |

| S55 | 4 | US-6319879-\$.DID. OR US-20020010102-\$.DID. | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON  | 2010/05/15<br>11:53 |
|-----|---|--|---|----|-----|---------------------|
| S56 | 0 | WO-2003031964-\$.DID.                        | US-PGPUB;<br>USPAT;<br>USOCR; EPO;<br>JPO;<br>DERWENT | OR | ON  | 2010/09/21<br>07:12 |
| S57 | 3 | ("2003031964"). PN.                          | DERWENT   | OR | OFF | 2010/09/21<br>07:13 |

## 9/21/2010 8:49:23 AM

H:\ East\ Workspaces\ lubrication oil composition for CVT 10594764.wsp